### **DRAFT NOTICE OF PROPOSED RULEMAKING**

# TITLE 18. ENVIRONMENTAL QUALITY

# CHAPTER 11. DEPARTMENT OF ENVIRONMENTAL QUALITY – WATER QUALITY STANDARDS

# **PREAMBLE**

1.	Article, Part, or Section Affected (as applicable)	Rulemaking Action
	R18-11-101	Amend
	Article 1, Appendix A	Amend
	Article 1, Appendix B	Amend
	Article 2	New Section
	R18-11-201	New Section
	R18-11-202	New Section
	R18-11-203	New Section
	R18-11-204	New Section
	R18-11-205	New Section
	R18-11-206	New Section
	R18-11-207	New Section
	R18-11-208	New Section
	R18-11-209	New Section
	R18-11-210	New Section
	R18-11-211	New Section
	R18-11-212	New Section
	R18-11-213	New Section
	R18-11-214	New Section

2. Citations to the agency's statutory rulemaking authority to include the authorizing statute and the implementing statute:

Authorizing Statute: A.R.S. §§49-202(A), 49-203(A)(1)

Implementing Statute: A.R.S. §§ 49-221, 49-222

3. Citations to all related notices published in the *Register* as specified in R1-1-409(A) that pertain to the record of the proposed rule:

Notice of Rulemaking Docket Opening: 28 A.A.R. 124, 28 A.A.R. 125

4. The agency's contact person who can answer questions about the rulemaking:

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5. A agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:

Historically, a broad spectrum of Arizona's lakes, ponds, streams and wetlands have been protected under the Federal Clean Water Act (CWA). This protection has included the regulation of discharges of pollutants to surface waters by the Arizona Department of Environmental Quality (ADEQ) via the Arizona Pollution Discharge Elimination System (AZPDES). This regulatory program has only been implemented to regulate discharges into "waters of the United States" (WOTUS).

The CWA does not define WOTUS, instead, it provides discretion for the U.S. Environmental Protection Agency (EPA) and the US Army Corps of Engineers (USACE) to define WOTUS in their rules. The lack of a firm definition of WOTUS has resulted in a consistent ebb and flow in CWA regulation, especially in the arid Southwest. Courts have expanded and narrowed the term and different Federal administrations have expanded and then narrowed the definition as well. These constant modifications of jurisdiction associated with the federal WOTUS definition have left Arizona high, dry, and suffering from a severe case of regulatory whiplash.

ADEQ created the Surface Water Protection Program (SWPP) to provide clear and consistent regulation for stakeholders despite the ever-changing reach of the Federal CWA. The SWPP is the result of a rigorous public process that has resulted in this effort to create a radically simple but effective approach to protect important State Waters that are not WOTUS and therefore would not receive the protections of a WOTUS.

HB2691 (2021) directs ADEQ to develop the SWPP and establish a variety of regulations by December 31, 2022. ADEQ is meeting that goal in this rulemaking by adopting the proposed Title 18, Chapter 11, Article 2 titled "Water Quality Standards for Non-WOTUS Protected Surface Waters. As part of the rulemaking to adopt standards for non-WOTUS protected surface waters, ADEQ must also modify the portion of the Arizona Administrative Code that houses the Arizona-specific rules to implement Federal CWA requirements in the State. This rulemaking modifies Title 18, Chapter 11, Article 1 to conform with the requirements of the statute and to ensure that the Federal and State programs can co-exist. Additionally, this rulemaking modifies Title 18, Chapter 9, Article 9 which contains the permitting program that implements the standards in Title 18, Chapter 11, Articles 1 and 2. This early draft release of the NPRM does not include the proposed modifications to Title 18, Chapter 9, Article 9. ADEQ will not make major modifications to the existing permitting program and the changes to that section will be solely to conform with the requirements of HB2691.

The scope of the SWPP rulemaking has dramatically changed since the initial legislation was passed. The original intent of the SWPP was to fill the gap between the Pre-2015 WOTUS definition and the Navigable Waters Protection Rule (NWPR). When the NWPR was vacated, ADEQ redirected agency efforts toward building a program that would insulate Arizona from further regulatory whiplash. Currently, the EPA is in the process of working another new WOTUS rule through the regulatory process, and the Supreme Court has granted certiorari on a case that could impact how ADEQ implements the existing pre-2015 rule. Both of those actions could have a dramatic impact on Arizona's regulatory programs for surface water.

This early draft of the NPRM proposes to protect 37 non-WOTUS waters, many of which were previously listed on Appendix B of Article 1. Additionally, it adopts water quality-based effluent standards that apply to those waters. Most importantly, the early draft of the NPRM establishes the framework ADEQ will use if the WOTUS definition is once again changed.

In addition to the draft NPRM, stakeholders should review ADEQ's technical papers at the "Stakeholder Meetings and Materials" link at azdeq.gov/SWPP. ADEQ also published the non-WOTUS reports for specific waters proposed for the PSWL. ADEQ shared these non-WOTUS reports with the EPA and received no comment from the EPA on these reports. Those documents provide information on much of the decision-making basis ADEQ has applied in this early draft.

Water Quality Standards in this Rulemaking

The SWPP established by HB2691 (2021) creates a dual-pronged approach for regulating surface water in Arizona. Waters that are considered Waters of the United States (WOTUS) will be regulated under the CWA program that is codified in Title 18, Chapter 11, Article 1 of the Arizona Administrative Code. Surface waters that are not WOTUS but qualify to be listed on the Protected Surface Waters List (PSWL) as non-WOTUS protected surface waters will be regulated by an Arizona-specific program established by ADEQ in this rulemaking in Title 18, Chapter 11, Article 2.

These two programs will exist in tandem, but a surface water reach will only be regulated by either the Federal program or the SWPP. There will be no joint jurisdiction of surface waters. During this initial SWPP rulemaking, ADEQ is striving to keep the two programs as similar as possible to provide consistency and clarity to permittees while the legal reach of the Federal CWA is in flux. The similarities between the two programs will ensure the original goal of the SWPP is met, and an ever-changing Federal definition of WOTUS will not result in significant compliance issues in Arizona as waters change between being regulated by the Federal program or the State program.

### The Protected Surface Waters List

One of the main features of the new Arizona SWPP is that it requires the Director of ADEQ to maintain and publish a Protected Surface Waters List (PSWL). Specifically, Sec. 7, Paragraph (G) of HB2691 requires that:

"The Director shall maintain and publish a Protected Surface Waters List. The Department shall publish the initial list on the Department's Website and in the Arizona Administrative Register within thirty days after the effective date of this amendment to this section. Not later than December 31, 2022, the Department shall adopt by rule the Protected Surface Waters List, including procedures for determining economic, social, and environmental costs and benefits."

The Final PSWL is the version of the list that will be codified in this rulemaking at Title 18, Chapter 11, Article 2, Appendix B to meet the HB2691 requirement that "[n]ot later than December 31, 2022, the Department shall adopt by rule the protected surface waters list." The Final PSWL will be updated periodically through ADEQ rulemaking actions.

Pursuant to the requirements of HB2691, the PSWL does include:

- 1. Waters of the United States;
- 2. The Bill Williams River, from its confluence of the Big Sandy River and the Santa Maria River to its confluence with the Colorado River:
- 3. The Colorado River, from the Arizona-Utah border to the Arizona Mexico border;
- 4. The Gila River, from the Arizona-New Mexico border to its confluence with the Colorado River;
- 5. The Little Colorado River, from the confluence of the east and west forks of the Little Colorado River to its confluence with the Colorado River;
- 6. The Salt River, from the confluence of the Black River and White River to its confluence with the Gila River;
- 7. The San Pedro River, from the Arizona-Mexico Border to the confluence with the Gila River;
- 8. The Santa Cruz River, from its origins in the Canelo Hills of Southeastern Arizona to its confluence with the Gila River; and
- 9. The Verde River, from Sullivan Lake to its confluence with the Salt River.

The PSWL does not include non-WOTUS waters that are:

1. Canals in the Yuma project and ditches, canals, pipes, impoundments and other facilities that are operated by districts organized under Arizona Revised Statutes (A.R.S.) Title 48, Chapters 18, 19, 20, 21 and 22 and that are not used to directly deliver water for human consumption, except when added pursuant to

- paragraph 4 of this subsection and in response to a written request from the owner and operator of the ditch or canal until the owner and operator withdraws its request.
- 2. Irrigated areas, including fields flooded for agricultural production.
- 3. Ornamental and urban ponds and lakes such as those owned by homeowners' associations and golf courses, except when added pursuant to an economic, environmental, and social cost-benefit analysis where the benefits of listing the water outweigh the costs and in response to a written request from the owner of the ornamental or urban pond or lake until the owner withdraws its request.
- 4. Swimming pools and other bodies of water that are regulated pursuant to A.R.S. § 49-104, subsection B.
- 5. Livestock and wildlife water tanks and aquaculture tanks that are not constructed within a protected surface water.
- 6. Stormwater control features.
- 7. Groundwater recharge, water reuse and wastewater recycling structures, including underground storage facilities and groundwater savings facilities permitted under A.R.S. Title 45, Chapter 3.1 and detention and infiltration basins, except when added pursuant to paragraph 4 of this subsection and in response to a written request from the owner of the groundwater recharge, water reuse or wastewater recycling structure until the owner withdraws its request.
- 8. Water-filled depressions created as part of mining or construction activities or pits excavated to obtain fill, sand or gravel.
- 9. All water treatment systems components, including constructed wetlands, lagoons and treatment ponds, such as settling or cooling ponds, designed to either convey or retain, concentrate, settle, reduce or remove pollutants, either actively or passively, from wastewater before discharge to eliminate discharge.
- 10. Groundwater.
- 11. Ephemeral waters
- 12. Lakes and ponds owned and managed by the United States Department of Defense and other surface waters located on an that do not leave United States Department of Defense property, except when added pursuant to paragraph 4 of this subsection and in response to a written request from the United States Department of Defense until it withdraws its request.

The PSWL also includes non-WOTUS surface waters that fall into the following categories:

- 1. All lakes, ponds, and reservoirs that are public waters used as a drinking source, for recreational or commercial fish consumption or for water-based recreation such as swimming, wading and boating and other types of recreation in and on the water;
- 2. Perennial waters or intermittent waters of the state that are used as a drinking water source, including ditches and canals;
- 3. Perennial or intermittent tributaries to the Bill Williams River, the Colorado River, the Gila River, the Little Colorado River, the Salt River, the San Pedro River, the Santa Cruz River and the Verde River;
- 4. Perennial or intermittent public waters used for recreational or commercial fish consumption;
- 5. Perennial or intermittent public waters used for water-based recreation such as swimming, wading, boating and other types of creation in and on the water;
- 6. Perennial or intermittent wetlands adjacent to waters on the protected surface waters list; and
- 7. Perennial or intermittent waters of the state that cross into another state, the Republic of Mexico or the reservation of a federally recognized tribe.

The PSWL that is published in the informal release of this draft NPRM is still subject to change. Specifically, ADEQ is considering the waters in the table below for inclusion in either Appendix B of Article 1 or on the non-WOTUS protected surface waters list in the PSWL. If the public wishes to provide any information on these waters, please refer to our PSWL white paper located at azdeq.gov/swpp to review the process and data ADEQ uses for making listing decisions.

Water Body ID	Reach Name	Water Type	Watershed	Comments
AZ15020002-645	Bluff Spring	Stream	LC	The raindrop tool traces a flowpath to Little Ortega Lake where the flowpath terminates. Bluff Spring is a perennial reach but does not connect to a downstream TNW.
AZ15010007-008A	Copper Sky Lake	Lake	MG	The lake is stocked, concrete perimeter with no inlets out outlets
AZ15010007-008B	Council Avenue Park Lake	Lake	CL	The pond was constructed between 1996 and 2003 and is not concrete lined. The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit.
AZ15010007-008C	Dave White Regional Park Pond-Casa Grande	Lake	SC	Isolated urban lake with a concrete perimeter and no outlet. The lake is stocked by Game and Fish
AZ15010007-194	Desert West Lake	Lake	MG	The pond was constructed between 1985 and 1997 and is concrete lined. The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit.
AZL15010007-1180	Discovery Park Lake	Lake	MG	The pond is stocked
AZ15010007-005	Festival Fields Pond	Lake	MG	Pond is stocked and has a concrete perimeter
AZ15010007-002	Fly Pond	Lake	SP	No waterbody present
AZ15010007-004	FREES WASH	Lake	CG	Terminal basin
AZ15010007-006A	Freestone Lake	Lake	MG	The pond is stocked
AZ15010007-006B	Friendship Lake	Lake	MG	Stocked lake, concrete perimeter and no outlet.
AZ15010007-003A	Graham County Fairgrounds Pond, Safford	Lake	UG	There is an inflow of city drinking water and an outflow to irrigate the ball fields and it has likely been there for decades (personal communication, county official). The pond is partially concrete lined.
AZ15010007-003B	Greenfield Lake	Lake	MG	The pond is stocked
AZL15030108-0142	Mansel Carter Oasis Lake	Lake	MG	The pond was constructed in 2018 and is concrete lined. The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit. The lake lies within the 500 year floodplain.
AZL15030107-9368	McQueen Lake	Lake	MG	The pond was constructed in 2018 and is concrete lined. The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit.
AZL15070201-0004A	Pacana Park Lake	Lake	MG	The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit. The pond was constructed in 2005 and is concrete lined.
AZL15070201-0004B	Pacific Avenue Athletic Complex Pond, Yuma	Lake	CL	The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit. The pond was constructed in 2018 and is concrete lined. The water level is maintained at a fairly constant level by inflow of drinking water that is used to irrigate the sports fields at the complex. There is no outflow from the pond, and therefore is considered a closed system (AZGF PAACP Fisheries Management Plan, 2019).
AZL15070201-0004C	Patterson Ponds, St. Johns Pond 1	Lake	LC	The ponds lie next to Upper Lyman Ditch, but the raindrop tool says the ditch flows northward to a dead end. The pond is not concrete lined. The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit.
AZL15070201-0004D	Patterson Ponds, St. Johns Pond 2	Lake	LC	The ponds lie next to Upper Lyman Ditch, but the raindrop tool says the ditch flows northward to a dead end. The pond is not concrete lined. The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit.

AZL15030107-1710	Pioneer Lake	Lake	MG	The lake is stocked, concrete perimeter, no outlet.
AZ15020002-645	Red Mountain park Lake	Lake	MG	
AZL15020015-3060	Rio Vista Park Pond	Lake	MG	The pond is stocked and is concrete lined, urban pond. Oustide of the 100 year floodplain on the FEMA map.
AZL15020015-3070	Sahuarita Lake,Tucson	Lake	SC	Artificial urban lake with a concrete perimeter and has no outlet to a natural channel or downstream.  The pond is stocked
AZL15020008-0021	Sawmill Spring	Stream		The raindrop tool traces a flowpath to Little Ortega Lake where the flowpath terminates. Sawmill Spring is a perennial reach but does not connect to a downstream TNW.
AZL15020002-0800	STRONGHOLD CANYON	Stream	SP	Willcox Playa terminal basin
AZ15020002-648	Surprise Lake	Lake	MG	artificial pond/lake with a sealed bottom and dirt/gravel perimeter and has no outlet. Stocked by Game and Fish.
AZL15020015-0970	Upper Walnut Canyon Lake	Lake	LC	Not stocked, isolated
AZL15020002-0682	Veterans Oasis Lake	Lake	MG	The pond is stocked with fish by the Arizona Game and Fish Department and can be used for recreational fishing with a permit. The pond was constructed in 2007 and is partially concrete lined.
AZL15020002-0467	Walnut Wash	Stream	SP	Willcox Playa terminal basin
AZ15020008-022	Water Ranch Lake	Lake	MG	The raindrop tool traces an incorrect flowpath to Firebird Lake. The lake is isolated and artificial.
AZL15060106B-1570	Vista Del Camino Park Lakes	Lake	MG	There are four lakes in this park and only one is listed on Appendix B. ADEQ is considering modifying this listing to include all of the lakes. 7700 East Roosevelt Street, Scottsdale at 33°27'33"/
15070102001048 on HiRes NHD	Unnamed tributary to the Agua Fria River	EDW	MG	From Softwinds WWTP outfall at 34° 32′ 43″, -112° 14′ 21″ to the Agua Fria River. Discharges to Agua Fria which is a jurisdictional tributary to Lake Pleasant (TNW)
AZ15070101-505	Corgett Wash	EDW	MG	From Corgett Wash WRF outfall at 33° 21' 42", - 112° 27' 05" to Gila River. The discharge point is 0.5 miles from the ephemeral conveyance Corgett Wash. The Gila River is then 1.5 miles downstream from Corgett Wash.
AZ15050202-425	Greenbush Draw	EDW	SP	From City of Bisbee San Jose WWTP outfall at 31° 20' 35.4", -109° 56' 10.2" to San Pedro River. The City of Bisbee San Jose WWTP outfall discharges to Greenbush Draw.
AZ15070103-001A	Hassayampa River, Jackrabbit Wash to Buckeye Canal	EDW	MG	From City of Buckeye-Palo Verde Road WWTP outfall at 33° 23' 54.3", -112° 40' 33.7" to Buckeye Canal
AZ15020009-001	Leroux Wash, tributary to Little Colorado River	EDW	LC	From City of Holbrook-Painted Mesa WRF outfall at 34° 54′ 30″, -110° 11′ 36″ to Little Colorado River. The outfall discharges into Leroux Wash. All reaches of the Little Colorado River between the outfall to the Colorado River are perennial or intermittent.
AZ15060202-415	Munds Creek, Tributary to Oak Creek	EDW	VR	From Pinewood Sanitary District Kay S. Blackman WWTP outfall at 34° 56′ 09″, -111° 38′ 35″ to Oak Creek. Munds Creek (an unnamed trib) flows to Oak Creek.
AZ15070104003-771	Unnamed tributary to Winters Wash	EDW	MG	From Balterra WWTP outfall at 33° 29' 45", -112° 55' 10" to Winters Wash
AZ15070102-005	Unnamed tributary to Deadman's Wash	EDW	MG	From EPCOR Water Anthem Water Campus WWTP outfall at 33° 50' 33", -112° 08' 17" to Deadman's Wash
15070102004011 on HiRes NHD	Unnamed wash, tributary to Black Canyon Creek	EDW	MG	From Black Canyon Ranch RV Resort WWTP outfall at to Black Canyon Creek.

15050100017692 on HIRes NHD	Unnamed wash, tributary to Queen Creek	EDW	MG	Queen Creek, AZ15050100-013B is closest WBID to outfall coordinates
AZ15020015-191B	Unnamed wash, tributary to Rio de Flag River (Bow and Arrow Wash)	EDW	LC	Treated municipal wastewater is piped from the Rio de Flag WWTP through a city-wide reuse system to the main effluent storage pond that is in an unnamed wash.
AZ0025135	Unnamed wash, tributary to Waterman Wash	EDW	MG	The Rainbow Valley outfall discharges to an unnamed wash to Waterman wash to the Gila River.

### Existing Water Quality Standards in Arizona

Section 303(c) of the CWA requires that all states adopt and maintain water quality standards for WOTUS. Adopting water quality standards allows the state to assess the health of Arizona waters and provides a legal basis for controlling pollutants entering a protected surface water. Arizona Revised Statutes (A.R.S.) § 49-222 provides the state-level authorization for ADEQ to adopt those water quality standards.

ADEQ uses the adopted water quality standards as the backbone of Arizona's implementation of the federal permitting program implemented by ADEQ that's called AZPDES. The AZPDES program provides permits for discharges to WOTUS that limit the additions of pollutants to those surface waters using five general types of provisions:

- 1. Technology-based effluent limitations;
- 2. Water-quality-based effluent limitations;
- 3. Monitoring and reporting requirements;
- 4. "Boilerplate" conditions;
- 5. Special conditions, for example, site-specific standards that are applicable.

The SWPP enabling legislation restricts the permitting provisions that could be applied to discharges to non-WOTUS protected surface waters. This is best summarized in how the legislation redefined the word "permit." A.R.S. §49-201(32) defines the word permit as follows: "[f]or the purposes of regulating non-WOTUS protected surface waters, [a] permit shall not include provisions governing the construction, operation, or modification of a facility except as necessary for the purpose of ensuring that discharge meets water quality-related effluent limitation or to require best management practices for the purpose of ensuring that a discharge does not cause an exceedance of an applicable surface water quality standard."

The restrictions present in the legislation mean the SWPP will regulate discharges to waters primarily based on water quality-based effluent limitations (WQBELs). WQBELS regulate discharges based upon the *actual impact* that a discharge has on receiving waters. The water quality standards established for a particular waterbody serve as the basis for imposing water-quality-based treatment controls in AZPDES permits.

# The Difference between CWA and SWPP Standards

Water quality standards are laws or regulations that consist of:

- 1. The designated use or uses of a waterbody;
- 2. The water quality criteria that are necessary to protect the use or uses; and
- 3. An antidegradation policy.

The SWPP borrows significantly from the Federal CWA structure with a few crucial distinctions. ADEQ *may not* adopt or apply water quality standards for non-WOTUS protected surface waters based on:

- 1. Antidegradation
- 2. Antidegradation Criteria

#### 3. Outstanding Arizona Waters

Because antidegradation standards and criteria are prohibited from being used in AZPDES permits for discharges to non-WOTUS protected surface waters, the rules that ADEQ is adopting in Title 18, Chapter 11, Article 2 do not include those types of water quality standards. Additionally, permits and conditions for discharges to non-WOTUS protected surface waters are prohibited from implementing any sections of the CWA directly, including sections 301, 302, 306, 307, 308, 312, 318, and 405. Permits issued for these discharges to non-WOTUS waters are not subject to review by the EPA. ADEQ is prohibited from adopting or applying rules regarding the following discharges to non-WOTUS protected surface waters:

- 1. Except as applied to discharges from publicly owned treatment works, requirements specific to new sources or new dischargers under the CWA.
- 2. Except for discharges from publicly owned treatment works, technology-based effluent limitations, standards, or controls, including new source performance standards, under sections 301(b), 304(b), and 306 of the CWA.
- 3. Requirements to express all permit limitations, standards, or prohibitions for a metal solely in terms of total recoverable metal.
- 4. Requirements for review and approval of permits by the USEPA before issuance.

### Designated Uses

Arizona's water quality standards under the CWA and SWPP designate specific uses for waters and then establish standards to protect those uses. ADEQ maintains a list of WOTUS and their corresponding, federally approved designated uses in A.A.C. Title 18, Chapter 11, Article 1, Appendix B.

The designated uses of a surface water are the most fundamental articulation of its role in Arizona's aquatic or human environment. These adopted uses express goals for the water, such as supporting aquatic life and human activities. Designated uses are generally assigned to waterbodies through rulemaking, which includes a public process and an opportunity for stakeholders to comment. To change or remove an existing designated use for a specific WOTUS, the CWA requires a Use Attainability Analysis (UAA). The findings in the UAA are submitted to EPA for approval.

The concept of protected surface water having designated uses is central to establishing appropriate water quality standards. Arizona's "menu" of designated uses listed at R18-11-104(B) provides for the protection and propagation of fish, shellfish, and wildlife and for recreation in and on the water.

The currently specified ADEQ-specified designated uses for WOTUS are:

- Domestic water source (DWS),
- Fish consumption (FC),
- Full body contact recreation (FBC),
- Partial body contact recreation (PBC),
- Aquatic and wildlife (cold water) (A&Wc) (acute and chronic),
- Aquatic and wildlife (warm water) (A&Ww) (acute and chronic),
- Aquatic and wildlife (effluent-dependent water) (A&Wedw) (acute and chronic),
- Aquatic and wildlife (ephemeral water) (A&We) (acute only),
- Agricultural irrigation (AgI), and
- Agricultural livestock watering (AgL).

ADEQ's four subcategories of aquatic and wildlife designated uses are meant to protect fish, shellfish, and wildlife (A&Wc, A&Ww, A&Wedw, and A&We). Every surface water in Arizona, with the exception of certain canals, has one of these four designated uses to protect the aquatic life and wildlife. Both the A&Wedw and A&We are assigned based on the flow characteristics of the water itself. The A&Wc and A&Ww are assigned

based on the relative elevation of the water. Intermittent and Perennial WOTUS protected surface waters located above 5000 ft. are assigned the A&Wc use and those below are assigned the A&Ww use.

ADEQ protects water quality for "recreation in and on the water" with the full-body contact recreation (FBC), partial body contact recreation (PBC), and fish consumption (FC) designated uses. These designated uses are intended to maintain and protect water quality for swimming, water-skiing, boating, wading, fishing, and other recreational uses. The FBC designated use is intended to protect public health when people engage in recreational activities that may involve full immersion in the water and potential ingestion of the water such as swimming. The PBC designated use is intended to protect public health when people engage in water-based recreational activities where full immersion and ingestion of the water are unlikely such as wading or boating. The FC designated use is intended to protect human health when fish or other aquatic organisms are taken from a surface water for human consumption.

ADEQ has considered the use and value of surface waters for public water supply by establishing the domestic water source (DWS) designated use. The DWS designated use applies to a surface water that is used as a raw water source for drinking water supply. The water quality criteria for the DWS designated use were developed assuming that treatment is necessary to yield drinking water suitable for human consumption. The DWS designated use applies to a surface water that has a water intake located along it which uses the surface water as a raw water source.

Finally, ADEQ recognizes the use and value of surface waters for agricultural purposes by establishing the agricultural irrigation (AgI) and agricultural livestock watering (AgL) designated uses. These uses are intended to maintain and protect surface water quality so water can be used for crop irrigation or to water cattle and other livestock.

ADEQ has not made meaningful modifications to the designated uses assigned to waterways during the last two triennial reviews and is not making significant modifications to assigned designated uses for WOTUS-protected surface waters in this rulemaking either.

# SWPP Designated Uses

As mentioned above, during the initial adoption of the SWPP, ADEQ is endeavoring to keep as many of the aspects of the new SWPP as similar as possible to the traditional AZPDES program that has already been deployed in Arizona. As a result, the SWPP will use eight designated uses that are similar to those that Arizona has developed for the CWA program. Notably, SWPP does not apply to ephemeral waterways, therefore, ADEQ will not adopt an aquatic and wildlife (ephemeral) use for the SWPP. ADEQ has determined at this time that there are no EDW's eligible for protection under the SWPP, therefore, ADEQ is not currently adopting EDW standards for non-WOTUS protected surface waters. Standards that cannot be applied to waters only create costs, and provide no benefits. Arizona's non-WOTUS protected surface waters list will use the following designated uses:

- Domestic water source AZ (DWSAZ),
- Fish consumption AZ (FCAZ),
- Full body contact recreation AZ (FBCAZ),
- Partial body contact recreation AZ (PBCAZ),
- Aquatic and wildlife (cold water) AZ (A&WcAZ) (acute and chronic),
- Aquatic and wildlife (warm water) AZ (A&WwAZ) (acute and chronic),
- Agricultural irrigation AZ (AgIAZ), and
- Agricultural livestock watering AZ (AgLAZ).

Future rulemakings for non-WOTUS protected surface waters may add or revise these designated uses.

#### Water Quality Criteria

The term "criteria" is used when referencing water quality standards in a few different ways. The term is a reference to a specific part of a state water quality standard – that is, a water quality standard is composed of

designated uses and the water quality criteria necessary to protect those uses. When Arizona adopts specific criteria they become the applicable regulatory requirements for protected waters.

Criteria to protect designated uses in Arizona are expressed in three ways:

- 1. Chemical-specific concentrations;
- 2. Toxicity levels; or
- 3. Narrative statements representing a quality of water that supports a particular use of a surface water.

### Chemical-Specific and Toxicity Criteria

The most direct way ADEQ protects a listed designated use is by adopting numeric surface water standards that establish specific limits on the concentrations of pollutants that will preserve that use. ADEQ adopts criteria for pollutants when they are listed by the EPA as either a toxic pollutant or a priority pollutant. When EPA lists a pollutant, they also publish an analytical test methodology that ADEQ can use to set numeric criteria that are appropriate for Arizona. These individual pollutant parameters are listed in A.A.C. Title 18, Chapter 11, Article 1, Appendix A, and R18-11-109. In adopting numeric water quality standards, ADEQ considers:

- The effect of unique local water quality characteristics on the toxicity of pollutants;
- The varying sensitivities of local affected aquatic populations to these pollutants; and
- The extent to which the stream's natural flow is perennial, intermittent, effluent-dependent, or ephemeral.

This rulemaking extends chemical-specific individual pollutant parameters to non-WOTUS protected surface waters in the proposed Title 18, Chapter 11, Article 2. Specifically, individual pollutant parameters for non-WOTUS protected surface waters are listed in the proposed Article 2, Appendix A and the proposed R18-11-206.

#### Narrative Criteria

Narrative criteria are general statements designed to protect the aesthetics and health of a waterway. Arizona's existing narrative criteria prevent permitted discharges of pollutants that result in any conditions listed in A.A.C. R18-11-108. Additionally, ADEQ has further defined the criteria when these conditions are violated in A.A.C. R18-11-108.01 and R18-11-108.02. ADEQ does have narrative nutrient criteria for lakes and reservoirs adopted at R18-11-108.03, but the EPA has not approved that rule.

Water quality criteria, numeric criteria, and narrative criteria are all based on a significant body of scientific work. Generally, standards are developed using a workgroup process or informal public meetings and are eventually proposed for public comment. Despite the level of effort that has gone into creating these standards, ADEQ has not relied on them extensively in permitting or enforcement actions.

This early draft of the SWPP rulemaking includes narrative standards that will apply to non-WOTUS protected surface waters at a level that is similar to those applied to WOTUS protected surface waters. This early informal draft does not include narrative-numeric criteria for bottom deposits, biocriteria, or nutrient standards for lakes. The rules in R18-11-108.03 have not been approved by the EPA, so their inclusion was not part of the ESE analysis that ADEQ performed. There are no waters on this first draft of the PSWL that are perennial, wadable streams so standards that are similar to R18-11-108.01 and R18-11-108.02 would not apply to any listed waters.

#### Economic, Social and Environmental Cost-Benefit Analysis

The SWPP requires an economic, social and environmental (ESE) cost-benefit analysis to adopt water quality standards at a certain level for a class of waters. This is not a requirement under the CWA, which only requires an economic analysis if a modification from an EPA-recommended standard is proposed. Because an ESE cost-benefit analysis is not required under the CWA, but is under the new SWPP, ADEQ is working to construct a formalized process to apply this analysis to water quality standards. ADEQ is still finalizing the cost/benefit analysis for adopting water quality standards for non-WOTUS protected surface waters at this time. This informal, draft release does not yet contain the finalized cost/benefit analysis. This informal, draft release presents

functional water quality standards that can be implemented in the existing AZPDES program. ADEQ welcomes feedback on the potential economic, social, and environmental costs and benefits of this draft rule.

ADEQ hired McClure Consulting Inc. to build a model for the ESE cost-benefit analysis at a broader level. An explanation of the valuation procedure being used by ADEQ can be found in the Economic, Social, and Environmental cost/benefit analysis technical paper at <a href="https://static.azdeq.gov/wqd/swpp/ese">https://static.azdeq.gov/wqd/swpp/ese</a> tp.pdf. Elements of that white paper will be included in the final NPRM.

#### Arizona Water Quality Standards Current State

ADEQ revises WOTUS water quality standards under a timetable established by the CWA. The CWA requires the agency to review A.A.C. Title 18, Chapter 11, Article 1, once every three years. This process is called the triennial review. EPA is required to review any modifications ADEQ makes to WOTUS water quality standards and approves the standards that meet the requirements of the CWA. ADEQ makes modifications to Arizona's WOTUS water quality standards through the State's rulemaking process, however, those changes don't take effect until EPA approval is received.

The EPA must approve or disapprove ADEQ's standards within a set amount of time established in the CWA and implementing regulations. If EPA approves ADEQ's submitted standards, the EPA must notify ADEQ within 60 days of receiving the submittal of Arizona's standards, rules, and supporting documentation. If EPA disapproves of Arizona's surface water quality standards, it must do so within 90 days of receiving the complete submittal of the surface water quality standards rules.

If the Regional Administrator disapproves a water quality standard, EPA must notify ADEQ, specifying:

- 1. Why the state standards are not in compliance with the CWA, and
- 2. The revisions ADEQ must make to its standards to assure compliance with the CWA before EPA could fully approve the standards<sup>1</sup>. Under § 303(c)(4) of the CWA, EPA must federally promulgate water quality standards no later than 90 days after the date of notice of the disapproval described above if ADEQ does not adopt the necessary revisions as specified by EPA within that time.

A state-adopted standard for WOTUS waters that EPA disapproves remains in effect until either:

- 1. ADEQ adopts the necessary revisions through the rulemaking process, or
- 2. EPA promulgates a federal water quality standard to supersede the disapproved water quality standard.

ADEQ completed its statutory obligation and submitted the regulatory modifications made during the 2019 triennial review to the EPA on November 19, 2019. During the review process, EPA signaled to ADEQ that a non-trivial number of individual pollutant parameters developed by ADEQ and listed in A.A.C. Title 18, Chapter 11, Article 1, Appendix A, Table 1 for certain designated uses would be disapproved as they did not meet the requirements of the CWA.

ADEQ submitted a request to formally withdraw portions of the 2019 Triennial Review on December 21, 2021. Specifically, ADEQ withdrew modifications of the individual pollutant parameters established in Appendix A, Table 1 for the domestic water source, fish consumption, full-body contact, and partial body contact designated uses from review. The EPA signaled that the Federal government could not approve these standards for individual pollutants due to incorrect assumptions ADEQ made during their development. ADEQ is committed to resolving those issues before submitting the next triennial review package to the EPA.

As part of the EPA's concurrence with ADEQ's partial withdrawal of the 2019 TR, EPA took additional action to approve some changes to water quality standards (WQS) in the 2019 TR that ADEQ did not withdraw. EPA approved the revisions to the definitions, antidegradation, mixing zones, and variance standards adopted in 2019

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<sup>&</sup>lt;sup>1</sup> See 40 C.F.R. § 131.21

on January 24, 2022. The EPA also approved portions of ADEQ's submittal that made minor formatting revisions and other corrections that were non-substantive.

The EPA has not acted on the changes to the 2019 TR individual pollutant parameters in Appendix A, Table 1 for the aquatic and wildlife cold, aquatic and wildlife warm, aquatic and wildlife ephemeral, aquatic and wildlife effluent-dependent water, agricultural irrigation, and agricultural livestock watering designated uses. The EPA has signaled to ADEQ that they will partially approve the modifications to those standards in 2022. EPA has communicated to ADEQ that they are waiting on the United States Fish and Wildlife Service to complete an evaluation as to whether ADEQ's new standards are protective enough of endangered species. Additionally, EPA has communicated to ADEQ that modifications made to ammonia standards that apply to the Warmwater and EDW uses may not be protective enough to approve under the CWA. ADEQ used Arizona specific species to calculate those standards.

The above facts have left Arizona with a patchwork of effective standards to apply to WOTUS, as illustrated below. Specifically:

- For the domestic water source, fish consumption, full-body contact, and partial body contact designated uses, the individual pollutant parameters from Arizona's 2016 Triennial Review will apply until modified and approved by the EPA in an upcoming Arizona action.
- For all aquatic and wildlife uses and agricultural irrigation use, the individual pollutant parameters from Arizona's 2016 are currently effective until EPA approves the modifications made by the 2019 TR.
- Narrative standards and changes made to the definitions, antidegradation, mixing zone, and variance portions of Arizona's water quality standards in the 2019 TR are currently effective.

Individual Parameters for Domestic Water Source Use  Individual Parameters for Fish Consumption Individual Parameters for Full-Body Contact  Effective  2016  2016  2016	of Standards Expected to be when SWPP is Adopted 2016
for Domestic Water Source Use  Individual Parameters for Fish Consumption Individual Parameters for Full-Body Contact  2016	
Source Use  Individual Parameters for Fish Consumption Individual Parameters for Full-Body Contact	2016
Individual Parameters for Fish Consumption Individual Parameters for Full-Body Contact	2016
for Fish Consumption Individual Parameters for Full-Body Contact	2016
Individual Parameters 2016 for Full-Body Contact	
for Full-Body Contact	
· ·	2016
Indiaideal Danamatana	
Individual Parameters 2016	2016
for Partial Body Contact	
Individual Parameters 2016	2019*
for Aquatic and Wildlife	
Uses	
Individual Parameters 2016	2019*
for Agricultural	
Irrigation Use	
Individual Parameters 2016	2019*
for Agricultural	
Livestock Use	
<b>R18-11-101. Definitions</b> 2019	2019
<b>R18-11-107.</b> 2019	2019
Antidegradation	
<b>R18-11-114. Mixing</b> 2019	2019
Zones	
<b>R18-11-122. Variances</b> 2019	

\*Dependent on USFWS review and EPA approval.

# Next Steps for CWA and SWPP Water Quality Standards

Actionable surface water quality standards are the building blocks for Arizona's Surface Water programs. As ADEQ adopts the SWPP, the agency will also seek to rectify some of the issues with the federal program and align water quality standards to the best of the agency's ability. To meet these goals, ADEQ will need to modify A.A.C. Title 18, Chapter 11, Article 1, Appendices A and B, in addition to adopting the new SWPP standards in A.A.C. Title 18, Chapter 11, Article 2. This early draft of the SWPP rulemaking:

- 1. Largely harmonizes designated uses between the State program and the Federal program.
- 2. Use existing Federal numeric standards if not prohibited, specifically numeric parameters for individual pollutants, to protect non-WOTUS waters.
- 3. Removes non-WOTUS waters from Article 1, Appendix B, and lists waters that meet the requirements of §49-221 as non-WOTUS protected surface waters on the PSWL in Article 2, Appendix B.

After the initial adoption of water quality standards for SWPP, ADEQ will continue to review the best available science and most recent guidance for establishing water quality standards. When new pollutants are listed by the EPA as toxic or priority pollutants, ADEQ will review the analytical test methodology, apply the ESE process, and determine if updated standards for the CWA program are appropriate for state-protected waters on the PSWL.

ADEQ is reiterating our ammonia standards for warm water and EDW uses for both the CWA portion of the program and the SWPP. ADEQ believes the Arizona-specific information that the agency used to calculate those standards accurately reflects the actual conditions of the water regulated. The agency will continue to work with EPA to provide the studies necessary to justify the ammonia standards from the 2019 TR.

#### Permitting

This early version of the SWPP rulemaking does not include modifications to A.A.C. Title 18, Chapter 9, Article 9. ADEQ believes that large portions of the permitting provisions in HB2691 are intentionally self-executing. ADEQ does not intend to meaningfully modify the AZPDES permitting program in this initial SWPP rulemaking, although the need to do so may arise in later rulemakings.

There are currently no permitted discharges to non-WOTUS protected surface waters. The cost of building a separate permitting program will issue no permits in this initial adoption is prohibitive as ADEQ would not see environmental benefits from adopting entirely separate provisions.

6. A reference to any study relevant to the rule that the agency reviewed and proposed either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

See ADEQ SWPP technical papers at <u>azdeq.gov/node/8173</u>.

7. The preliminary summary of the economic, small business, and consumer impact:

See ADEQ's Social, Environmental, and Economic cost/benefit analysis technical paper at azdeq.gov/node/8173.

8. The agency's contact person who can answer questions about the economic, small business and consumer impact statement:

Name: Jonathan Quinsey

Address: Department of Environmental Quality

Telephone: (602) 771-8193

Email: Quinsey.Jonathan@azdeq.gov

9. The time, place, and nature of the proceedings to make, amend, repeal, or renumber the rule, or if no proceeding is scheduled, where, when, and how persons may request an oral proceeding on the proposed rule:

- 10. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:
  - a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

This rule will require entities that discharge to non-WOTUS protected surface water

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

The Clean Water Act and implementing regulations adopted by EPA apply to the subject of this rule, as described in Section 5 above. Article 2 of this rulemaking establishes water quality standards that are applicable to surface waters that are not protected under the Clean Water Act. These standards are inherently more stringent than those required by federal law because they extend Clean Water Act type protections to waters no protected under the act.

ADEQ was given explicit statutory authority to develop a program to protect these surface waters by HB2691(2021). That bill is codified at A.R.S. §§ 49-202.01, 49-221, 49-255.04, and 49-255.05.

c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:

No such analysis was submitted.

- 11. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:
- 12. The full text of the rules follows: